

PATENT COOPERATION TREATY

From the
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

PCT

To:

ISHII, Kazuo
Kitahama-Yamamoto Building
3-6, Kitahama 2-chome, Chuo-ku
Osaka-shi, Osaka 541-0041
JAPON



NOTIFICATION OF TRANSMITTAL OF
THE INTERNATIONAL PRELIMINARY
EXAMINATION REPORT
(PCT Rule 71.1)

Date of mailing
(day/month/year)

18.06.2004

Applicant's or agent's file reference
P30159-P0

IMPORTANT NOTIFICATION

International application No.
PCT/JP 03/02963

International filing date (day/month/year)
12.03.2003

Priority date (day/month/year)
01.04.2002

Applicant

MATSUSHITA ELECTRIC INDUSTRIAL CO., LTD. et al.

1. The applicant is hereby notified that this International Preliminary Examining Authority transmits herewith the international preliminary examination report and its annexes, if any, established on the international application.
2. A copy of the report and its annexes, if any, is being transmitted to the International Bureau for communication to all the elected Offices.
3. Where required by any of the elected Offices, the International Bureau will prepare an English translation of the report (but not of any annexes) and will transmit such translation to those Offices.
4. **REMINDER**

The applicant must enter the national phase before each elected Office by performing certain acts (filing translations and paying national fees) within 30 months from the priority date (or later in some Offices) (Article 39(1)) (see also the reminder sent by the International Bureau with Form PCT/IB/301).

Where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary examination report. It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned.

For further details on the applicable time limits and requirements of the elected Offices, see Volume II of the PCT Applicant's Guide.

The applicant's attention is drawn to Article 33(5), which provides that the criteria of novelty, inventive step and industrial applicability described in Article 33(2) to (4) merely serve the purposes of international preliminary examination and that "any Contracting State may apply additional or different criteria for the purposes of deciding whether, in that State, the claimed inventions is patentable or not" (see also Article 27(5)). Such additional criteria may relate, for example, to exemptions from patentability, requirements for enabling disclosure, clarity and support for the claims.

Name and mailing address of the international
preliminary examining authority:



European Patent Office
D-80298 Munich
Tel. +49 89 2399 - 0 Tx: 523656 epmu d
Fax: +49 89 2399 - 4465

Authorized Officer

Marchetto, L

Tel. +49 89 2399-2796





PATENT COOPERATION TREATY

PCT



INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference P30159-P0	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/PEA/416)	
International application No. PCT/JP 03/02963	International filing date (day/month/year) 12.03.2003	Priority date (day/month/year) 01.04.2002
International Patent Classification (IPC) or both national classification and IPC H01M6/06		
Applicant MATSUSHITA ELECTRIC INDUSTRIAL CO., LTD. et al.		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 7 sheets, including this cover sheet.
- ☒ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).
- These annexes consist of a total of 4 sheets.

3. This report contains indications relating to the following items:
- I ☒ Basis of the opinion
 - II ☐ Priority
 - III ☒ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
 - IV ☐ Lack of unity of invention
 - V ☒ Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
 - VI ☐ Certain documents cited
 - VII ☐ Certain defects in the international application
 - VIII ☐ Certain observations on the international application

Date of submission of the demand 10.06.2003	Date of completion of this report 18.06.2004
Name and mailing address of the international preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized Officer Fitzpatrick, J Telephone No. +49 89 2399-8570 

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No. PCT/JP 03/02963

I. Basis of the report

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

Description, Pages

1, 3, 5-15 as originally filed
2, 4 received on 15.12.2003 with letter of 10.12.2003

Claims, Numbers

1-6 received on 15.12.2003 with letter of 10.12.2003

Drawings, Sheets

1 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
☐ the language of publication of the international application (under Rule 48.3(b)).
☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
☐ filed together with the international application in computer readable form.
☐ furnished subsequently to this Authority in written form.
☐ furnished subsequently to this Authority in computer readable form.
☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
☐ the claims, Nos.:
☐ the drawings, sheets:

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

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5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

see separate sheet

III. Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

1. The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non-obvious), or to be industrially applicable have not been examined in respect of:

☐ the entire international application,

☒ claims Nos. 1(part),6(part),2,4,5

because:

☐ the said international application, or the said claims Nos. relate to the following subject matter which does not require an international preliminary examination (specify):

☒ the description, claims or drawings (*indicate particular elements below*) or said claims Nos. 1(part),6(part),2,4,5 are so unclear that no meaningful opinion could be formed (*specify*):

see separate sheet

☐ the claims, or said claims Nos. are so inadequately supported by the description that no meaningful opinion could be formed.

☒ no international search report has been established for the said claims Nos. 1(part),6(part),2,4,5

2. A meaningful international preliminary examination cannot be carried out due to the failure of the nucleotide and/or amino acid sequence listing to comply with the standard provided for in Annex C of the Administrative Instructions:

☐ the written form has not been furnished or does not comply with the Standard.

☐ the computer readable form has not been furnished or does not comply with the Standard.

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	3
	No: Claims	1,2,4-6
Inventive step (IS)	Yes: Claims	
	No: Claims	3
Industrial applicability (IA)	Yes: Claims	1-6
	No: Claims	

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

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2. Citations and explanations

see separate sheet

Section I.6: Additional Observations

The amendments to claims 1 and 6, namely the 20°C lower temperature limitation are acceptable under Art.34(2)(b) PCT, having fair originally filed bases derivable from the technique adopted for determining the endothermic amounts described on page 11, lines 3-6 and the obtained values indicated in Table 1.

Section III: Limited Opinion

Present independent claims 1 and 6 relate to products defined (inter alia) by reference to the following parameter:

"the endothermic amount of said paraffin wax or said microcrystalline wax obtained by differential scanning calorimetry at 20 to 45°C is not more than 1.0J/g."

Dependent claims 2,4 and 5 employ similar terminology.

The use of these parameters in the present context is considered to lead to a lack of clarity within the meaning of Article 6 PCT. It is impossible to compare the parameters the applicant has chosen to employ with what is set out in the prior art. The lack of clarity is such as to render a meaningful complete search impossible. Consequently, the search has been restricted to the remaining subject matter of claims 1 and 6 as well as that of claim 3 and those parts relating to the embodiments and products mentioned in the description at pages 6-8 and in Examples 1-3.

In the above regard, the applicant has cited a prior art document Japanese Laid-Open Publication No. 2001-312093 which cites similar terminology for determining the endothermic amount of a developer material by differential scanning calorimetry and that this technique thus belongs to the state of the art. The IPEA accepts this point but this has no influence on its above position in that the use of such parameters as a means of establishing novelty does not allow a fair comparison to be made with state of the art materials which may fulfill this condition but without explicitly stating that in the prior art document(s) in question (see also PCT Guidelines, Chapter III, 4.7a).

Section V.2: Citations and Explanations

Reference is made to the following documents:

D1: JP(A) 03297063

D2: JP(A) 63168968

(i) Document D1 discloses a dipping treatment method for carbon rod for manganese dry cell for the purpose of enhancing its high temperature storage characteristics by impregnating the carbon rod with a specific compound as impregnating material, and preventing ooze of the impregnating material at the surface of carbon rod during storage at high temp. The impregnating material contains chiefly paraffin wax consisting of hydrocarbon compound with a molecular weight of 300-500 with normal paraffin as major component, or microcrystalline-wax consisting of isoparaffin and cycloparaffin series hydrocarbon admixture. Although, the molecular weight of the letter is stated to be 35-60, this is of course an obvious mistake (such a molecular weight would lead at best to a volatile liquid and certainly not the undermentioned material having a minimum melting point of 90°C) and should thus read "molecular weight of 350 to 600" or "carbon number of 35-60". Thereto is added crystalline polyolefin series resin, wherein the resistant compound has a melting point of 90 deg.C or more. This disclosure is thus prejudicial to the novelty of the clear subject matters of claims 1 and 6

(ii) Moreover however, in the paragraph bridging pages 5 and 6 of the current application, it is clear that the disclosure of D1 above also fulfills at least the requirements of the characterising parts of current claims 1 and 6 as well as the additional subject of claims 2,4 and 5. The subject matters of claims 2,4 and 5 are consequently also not new.

(iii) Whilst document D2 does not explicitly disclose the specific types of waxes currently claimed, it addresses the same problem of sealing the carbon rod from air via impregnating it with waxes having as high a melting point as possible, (not less than 45°C and preferably between 45 and 90°C) such as to improve high temperature storage and such as to minimise contact resistances between the carbon rod and the positive electrode black mix. The skilled person then merely has to select such suitable conventionally known waxes suitable for this purpose. Inventive step of the subject matters of claims 1 and 6 is thus also compromised.

(iv) The features of claim 3 appears to be only formally new and could not lead to subject matter meeting the inventive step requirements of Art.33(3) PCT in that the broad range of density quoted appears to cover conventional high and low density rods with correspondingly low and high porosities respective.

(v) Further to Section III above, the offending subject matters of claims 1,2 and 4-6 do not meet the requirements of Article 6 PCT in that the matter for which protection is sought is not clearly defined. The claims attempts to define the subject-matter in terms of the result to be achieved which merely amounts to a statement of the underlying problem. The technical features necessary for achieving this result should be added.

(vi) From page 12, last paragraph and Table 1 on page 13, the comparative example employs the same paraffin wax as that of Example 1. As such, the wax per se must fulfill the condition corresponding to the post-characterising portion of the main claims. Indeed, said portion only refers to the wax. In contrast, page 11, 2nd paragraph refers to "the endothermic amount **of the obtained positive electrode current collector**"
The current set of claims are thus rendered further unclear, contrary to Art.6 PCT.